

What is claimed is:

1. In an Integrated Communications System ("ICS") having an Ethernet backplane, a method for assigning an IP address to at least one internal ICS chassis occupant comprising:

5 receiving a request for an IP address from a component;
determining whether said request was received from one of the said at least one internal chassis occupant; and
assigning an IP address to at least one internal chassis occupant if said request was received from one of said at least one internal chassis occupant.

10 2. The method of Claim 1, wherein the said act of determining whether said request was received from one of the said at least one internal chassis occupant further includes:

querying if a System Switch Processor has recorded a MAC address for the said at least one internal chassis occupant.

15 3. The method of Claim 1, further including the act of ignoring said IP address request and returning to act of receiving a next IP address request if said component is not an internal chassis occupant.

4. An ICS comprising:

an Ethernet backplane;

20 at least one internal ICS chassis occupant operatively coupled to said backplane; and

wherein said at least one internal chassis occupant is configured to assign IP addresses.

5. The ICS of Claim 4, wherein said at least one chassis occupant is further configured to:

- 5 receive a request for an IP address from a component;
- determine whether said request was received from one of said at least one internal chassis occupant; and
- assign an IP address to at least one internal chassis occupant if said request was received from one of said at least one internal chassis occupant.

10 6. The ICS of Claim 5, wherein said ICS is comprised of eight card slots.

7. The ICS of Claim 6, wherein one card slot of the said eight card slots is dedicated to a System Switch Processor card, wherein one card slot of the said eight card slots is dedicated to a System Alarm Processor card, and wherein the remaining six card slots of the said eight card slots may interchangeably house

15 various cards selected by a user.

8. The ICS of Claim 7, wherein said cards selected by the user are multiservice route processor cards.

9. The ICS of Claim 7, wherein said cards selected by the user are system processing engine cards.

20 10. An apparatus for assigning an IP address to at least one internal chassis occupant of an ICS comprising:

means for receiving an IP address from a component;

means for determining whether said request was received from one of the said at least one internal chassis occupant; and

means for assigning an IP address to at least one internal chassis occupant if said request was received from one of said at least one internal chassis occupant.

11. The apparatus of Claim 10 further comprising a means for ignoring said IP address request and returning to means of receiving a next IP address request if said component is not an internal chassis occupant,

12. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for assigning an IP address to at least one internal chassis occupant of an ICS, said method comprising:

receiving a request for an IP address from a component;
determining whether said request was received from one of the said at least one internal chassis occupant; and

assigning an IP address to at least one internal chassis occupant if said request was received from one of said at least one internal chassis occupant.

13. The program storage device of Claim 12, wherein the said act of determining whether said request was received from one of the said at least one internal chassis occupant further comprises:

querying if a System Switch Processor has recorded a MAC address for the said at least one internal chassis occupant.

14. The program storage device of Claim 12, said method further including the act of ignoring said IP address request and returning to act of receiving a next IP address request if said component is not an internal chassis occupant.

15. In an ICS having an Ethernet backplane, said backplane coupled to at least
5 one internal ICS chassis occupant, wherein said at least one internal chassis occupant having an IP address assignment module ("IPAM") operatively disposed within it, a method for assigning an IP address to said at least one internal chassis occupant comprising:

receiving, by said IPAM, a request for an IP address from a
10 component;

determining, by said IPAM, whether said request was received from one of the said at least one internal chassis occupant; and

assigning an IP address, by said IPAM, to at least one internal chassis occupant if said request was received from one of said at least one internal
15 chassis occupant.

16. The method of Claim 15, wherein the said act of determining whether said request was received from one of the said at least one internal chassis occupant further includes:

querying, by said IPAM, if a System Switch Processor has recorded
20 a MAC address for the said at least one internal chassis occupant.

17. The method of Claim 15, further including the act of ignoring, by the IPAM, said IP address request and returning to act of receiving a next IP address request if said component is not an internal chassis occupant.